A Taxonomic Note on *Polygonia faunus arcticus* Leussler

(Lepidoptera: Nymphalidae)

Cyril F. dos Passos

Washington Corners, Mendham, N.J. 07945

Polygonia faunus arcticus, proposed by Leussler (1935, 30(1):56), with the type locality "base Black Mt., 30 mi. S.W. Aklavik, North West Territories," is in fact not a subspecies of *Grapta faunus* Edwards (1862:222, type locality-Hunter, Greene County, New York) (dos Passos and Brown *in* Brown 1967:338) but of *G. hylas* Edwards (1872:68, type locality-Colorado, lectotype by dos Passos and Brown (1967:341), type locality-vicinity Berthoud Pass, Colorado).

When the writer purchased the Owen Bryant collection of butterflies, it contained specimens with Leussler number 32 labeled as follows:

#32 — Type series, leg. Owen Bryant, consisted of 7 males and 7 females, including the holotype male and allotype female which were given by me to the American Museum of Natural History. These were taken May 18, 1931, in grass and on the border of woods about a lake. The remaining 6 males and 6 females were designated paratypes.

Leussler remarked after his description, "They are much smaller than typical *faunus* and much greyer on the under surface. In fact, they resemble the Rocky Mountain form of *hylas* more closely than typical *faunus.*" How prophetic that statement was, because the specimens are, in fact, *hylas* and not *faunus.*

A few remaining specimens with same number (32) and taken at later dates in 1931 were not designated paratypes.

Conclusion: Leussler's name should be written as *Polygonia hylas arcticus* Leussler, 1935, a new combination.

The provisions of the Code concerning new combinations relate only to the transfer of a species-group to a different genus-group and not to the transfer of a subspecies to a different species (Code, Arts. 48a, 51d). The Code does not contain any provision concerning the latter action or against using "a new combination" in the present case, which seems appropriate.

References Cited

dos Passos, Cyril F. and F. Martin Brown. 1967. *in* Brown, The types of the nymphalid butterflies described by William Henry Edwards — Part III Nymphalinae, Limenitidinae, Apaturinae and Charaxinae. Trans. Amer. Entomol. Soc. 93: 319-393.

Edwards, William Henry. 1862. Descriptions of certain species of diurnal Lepidoptera found within the limits of the United States and of British America. No. 3. Proc. Acad. Nat. Sci. Philadelphia 14(6):221-226.

The Pan-Pacific Entomologist 53:179-180. July 1977.

Edwards, William Henry. 1870. Descriptions of new species of diurnal Lepidoptera found within the United States. Trans. Amer. Entomol. Soc. 3(1):10-22.

Edwards, William Henry. 1872. Descriptions of new species of diurnal Lepidoptera found within the United States. V Trans. Amer. Entomol. Soc. 4(1):61-70.

Leussler, Richard August. 1935. Notes on diurnal Lepidoptera of the Canadian Arctic collected by Owen Bryant in the summers of 1929 to 1932. With introductions and field notes by Owen Bryant. Bull. Brooklyn Entomol. Soc. No. 1, 30(1):1-10, No. 2, (2):42-62, No. 3, (3):115-118.

BOOK REVIEW

Animal Communication by Pheromones. H.H. Shorey, Academic Press, New York, 1976, 167 pp., illus. $16.50.

In this book the author has assimilated the available information concerning pheromone communication within the entire animal kingdom and presented it in a concise, cohesive manner. The text is organized along behavioral lines, illustrating various types of behavior stimulated by pheromones, the mechanisms by which the behaviors occur, and the adaptive advantages which accrue from the behaviors. The author has restricted his discussion to chemical communication between individuals of the same species. Further, he does not discuss primer pheromones, but focuses entirely on behavioral responses stimulated by releaser pheromones. He has limited his discussion of pheromone chemistry to the illustration of the structures of the various pheromones he discusses.

Within the limits the author has set, this is an excellent book. It is well written and the various aspects of behavior in response to pheromones are clearly explained. The brevity of the text (only 121 pages including illustrations) is both a credit to the book and a fault. It is definitely an advantage to have this information presented so clearly and concisely and yet the treatment of several of the topics left the reader feeling that more discussion was needed. In some instances further examples would have been useful, particularly to new students in this field. However, this does not seriously decrease the value of this book.

The text is well illustrated with photographs and drawings that aid in explaining some of the points discussed. Additionally, the bibliography contains 726 references that add considerably to the value of this book as a source of information. The book is highly recommended to serious students of pheromonal communication and animal behavior. — J. H. TUMLINSON, *Insect Attractants, Behavior and Basic Biology Research Laboratory Agricultural Research Service, USDA, Gainesville, Florida 32604.*